

REMARKS

In the Office Action, the Examiner rejected Claims 1-22, which are all of the pending claims, under 35 U.S.C. §103 as being unpatentable over U.S. Patent 5,767,842 (Korth) in view of U.S. Patent 6,407,679 (Evans, et al.).

Applicants are herein amending independent Claims 1, 4, 8, 9, 10, 14, 17 and 21 to better describe the subject matters of these claims.

For the reasons set forth below, Applicants believe that Claims 1-22, as presented herewith, patentably distinguish over the prior art and are allowable, and the Examiner is, accordingly, respectfully asked to reconsider and to withdraw the rejection of Claims 1-22, and to allow these claims.

The present invention, generally, relates to methods and systems for generating text or data from typing gestures made without the presence of any physical keyboard. In the practice of this invention, a person moves his or her hands as if that person was typing, and, using various computer processes, those finger movements are transformed into text. In particular, these computer processes classify the finger gestures into classes, and then associate each of these classes with one of the keys of a keyboard.

In the Office Action, the Examiner indicated that Korth does not disclose classifying gestures into classes and associating each of those classes with one of the keys of the keyboard. However, the Examiner argued that Evans, et al teaches these or similar features.

Importantly, in Evans, movement of a particular finger is always associated with the same initial value. After a series of finger movements have generated a number sequence, such as 228, that sequence is matched to a word in a dictionary, such as "cat."

The present invention operates in a different manner. With this invention, movement of one finger is initially associated with a respective one of a plurality of classes depending on the specific movement of the finger. For example, movement of the same finger may be associated with a respective one of three classes – eventually transformed into “c,” “d” or “e”, depending on the specific movement of the finger. One type of movement of that finger may be associated with a first class, which is eventually transformed into a “c,” and a different type of movement of that same finger may be associated with a second class, which is eventually transformed into a “d”. A third type of movement of that same finger may be associated with a third class that is eventually transformed into an “e.”

This feature of the invention is of utility for a number of reasons. First, the finger gestures themselves can be used to spell out words or to determine the most probable word from the finger gestures, and it is not necessary to use the type of dictionary used in Evans, et al. In addition, this feature, again in comparison to Evans, et al., enables the use of a substantially larger vocabulary.

Applicants are herein amending independent Claims 1, 4, 8, 9, 10, 14, 17 and 21 to emphasize the above-discussed feature of this invention. In particular, each of Claims 1, 8, 9, 10 and 17 is being amended to indicate that the computer processes set forth in these claims classify each type of gesture image into a respective one of a plurality of classes depending on the type of gesture, and associate each of those classes with one of the keys of the virtual keyboard. Claim 4 is being amended to include the limitation that the gesture classifier module classifies each type of gesture into one of a plurality of classes depending on the type of gesture. Also, as amended herein, Claims 14 and 21, respectively, set forth the step of, and means for, classifying each type of gesture into one of a plurality of classes depending on the type of gesture.

The other references of record have been reviewed, and these other references, whether they are considered individually or in combination, are not believed to be any more pertinent than Korth or Evans, et al. Specifically, these other references fail to disclose or suggest the feature of classifying each type of gesture or gesture image into a respective one of a plurality of classes, which are then associated with individual keys of a virtual keyboard.

Because of the above-discussed differences between Claims 1, 4, 8, 9, 10, 14, 17 and 21 and the prior art, and because of the advantages associated with those differences, these claims patentably distinguish over the prior art and are allowable. Claims 2, 3 and 7 are dependent from, and are allowable with, Claim 1; and Claims 5 and 6 are dependent from, and are allowable with, Claim 4. Similarly, Claims 11-13 are dependent from Claim 10 and are allowable therewith, and Claims 15 and 16 are dependent from Claim 14 and are allowable therewith. Claims 18-20 are dependent from Claim 17 and are allowable therewith; and Claim 22 is dependent from, and is allowable with, Claim 21.

For the reasons discussed above, the Examiner is respectfully asked to reconsider and to withdraw the rejection of Claims 1-22 under 35 U.S.C. P103, and to allow these claims. If the Examiner believes that a telephone conference with Applicants' Attorneys would be advantageous to the disposition of this case, the Examiner is asked to telephone the undersigned.

Respectfully submitted,

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